

# **FAMILY AND CONSUMER SCIENCES**

## **Comprehensive Option**

**The Iowa Family and Consumer Sciences model includes national standards, national benchmarks, required minimum Iowa competencies (indicators) and academic proficiencies.**

### **Housing, Interiors, and Furnishings**

**Standard I:** Integrate knowledge, skills, and practices required for careers in housing, interiors, and furnishings.

#### **Benchmarks:**

1. Analyze career paths within the housing, interiors, and furnishings industry.
2. Evaluate housing decisions in relation to available resources and options.
3. Evaluate the use of housing and interior furnishings and products in meeting specific design needs.
4. Demonstrate computer-aided drafting design, blueprint reading, and space planning skills required for the housing, interiors, and furnishings industry.
5. Analyze influences on architectural and furniture design and development.
6. Evaluate client's needs, goals, and resources in creating design plans for housing, interiors, and furnishings.
7. Demonstrate design ideas through visual presentation.
8. Demonstrate general procedures for business profitability and career success.

#### **Minimum Required Iowa Competencies (Indicators):**

1. Identify recent trends in housing.
2. Explain basic financial and legal aspects of housing in various demographic situations.
3. Evaluate housing alternatives (i.e., floor plans, structure and maintenance of a residence, safety, energy, lifestyles and populations with special needs).
4. Examine design principles and elements.
5. Identify qualities of home furnishings and appliances (i.e., performance, safety, cost, quality, efficiency, space and cleanability).
6. Examine home furnishings-home management related occupations.
7. Locate and/or utilize housing, home furnishings, management and equipment resources for assistance.
8. Demonstrate safety, sanitation, security and first aid procedures.

#### **Academic Proficiencies:**

##### **Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information

- Demonstrates competence in making oral formal and informal presentations, including selecting and using media
- Adapts listening strategies to utilize verbal and nonverbal content of communication
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation

**Mathematics:**

- Constructs and interprets charts, tables, and graphs
- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root, calculate percentages, ratios, and formulas
- Mentally adds, subtracts, divides, and multiplies whole numbers
- Precisely calculates areas, circumferences, perimeters, and surface areas of geometric figures
- Estimates and rounds to determine estimated outcomes
- Measures distance, using standard measurement tools
- Distinguishes proportions and congruence
- Identifies the application of statistical processes
- Constructs angles, geometric figures, and lines
- Distinguishes characteristics of angles, circles, and arcs
- Interprets common symbols such as  $<$ ,  $>$ , and  $=$
- Identifies parallel/perpendicular, vertical/horizontal lines, and line rays/segments

**Science:**

- Uses computers for information processing
- Analyzes and evaluates environmental issues

### **Consumer and Family Resources**

**Standard II:** Evaluate management practices related to the human, economic, and environmental resources.

**Benchmarks:**

1. Demonstrate management of individual and family resources, including food, clothing, shelter, health care, recreation, and transportation.
2. Analyze the relationship of the environment to family and consumer resources.
3. Analyze policies that support consumer rights and responsibilities.
4. Evaluate the impact of technology on individual and family resources.
5. Analyze interrelationships between the economic system and consumer actions.
6. Demonstrate management of financial resources to meet the goals of individuals and families across the life span.

**Minimum Required Iowa Competencies (Indicators):**

1. Identify procedures in planning for expenses, saving and managing finances.
2. Apply the principles of management in the home (i.e., prioritizing, planning, delegation, evaluation, time allocation).
3. Determine the decision-making process used when calculating expenses, savings and managing finances (i.e., insurance retirement).

**Academic Proficiencies:****Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media
- Adapts listening strategies to utilize verbal and nonverbal content of communication

**Mathematics**

- Interprets charts, tables, and graphs
- Adds, subtracts, divides, and multiplies, mixed numbers, fractions, and decimals
- Uses a calculator to add, subtract, divide, and multiply whole and mixed numbers, decimals, calculate square root, percentages and ratios
- Mentally adds, subtracts, divides and multiplies whole numbers

**Facilities Management and Maintenance**

**Standard III:** Integrate knowledge, skills, and practices required for careers in facilities management and maintenance.

**Benchmarks:**

1. Analyze career paths within the facilities management and maintenance areas.
2. Demonstrate planning, organizing, and maintaining an efficient housekeeping operation.
3. Demonstrate sanitation procedures for a clean and safe environment.
4. Apply hazardous materials and waste management procedures.
5. Demonstrate a work environment that provides safety and security.
6. Demonstrate appropriate laundering processes.
7. Demonstrate facilities management functions.

**Minimum Required Iowa Competencies (Indicators):**

1. Use equipment and supplies with proper procedures.

**Academic Proficiencies:****Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Adapts listening strategies to utilize verbal and nonverbal content of communication
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media

**Mathematics**

- Interprets charts, tables, and graphs
- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, calculate square root, percentages, and ratios
- Mentally adds, subtracts, divides, and multiplies whole numbers
- Understands and applies basic and advanced methods of measurement
- Precisely calculates areas, circumferences, perimeters, volume, and surface areas of geometric figures
- Solves problems and generates conclusions using deductive reasoning
- Understands geometric figures using visual perception and line and angle relationships
- Distinguishes characteristics of angles, circles, and arcs
- Measures angles
- Constructs lines, both parallel and perpendicular

**Science**

- Uses computers for information processing
- Knows the environment impact of materials (solid, liquid, gaseous)
- Identifies acids and bases
- Describes and explains chemical reactions related to contamination

**Food Production and Services**

**Standard IV:** Integrate knowledge, skills, and practices required for careers in food production and services.

**Benchmarks:**

1. Analyze career paths within the food production and food services industries.
2. Demonstrate food safety and sanitation procedures.
3. Demonstrate selecting, using, and maintaining food production equipment.
4. Demonstrate planning menu items based on standardized recipes to meet customer needs.
5. Demonstrate commercial preparation for all menu categories to produce a variety of food products.
6. Demonstrate implementation of food service management functions.
7. Demonstrate the concept of internal and external customer service.

**Minimum Required Iowa Competencies (Indicators):**

1. Examine food-related occupations.

**Academic Proficiencies:****Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information

- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation
- Follows written and oral directions to complete tasks
- Informally discusses, requests, and supplies information to associates
- Adapts listening strategies to utilize verbal and nonverbal content of communication

### **Mathematics**

- Interprets charts, tables, and graphs
- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, calculate square root, percentages, and ratios
- Mentally adds, subtracts, divides, and multiplies whole numbers
- Measures time, temperature, volume, and weight
- Converts word problems to mathematical expressions
- Uses inductive and deductive reasoning to solve problems
- Distinguishes proportions and congruence
- Identifies the application of statistical processes
- Uses a calculator or computer to manipulate formulas
- Understands and applies basic and advanced methods of measurement
- Calculates and evaluates algebraic expressions; and solves problems and generates conclusions using deductive reasoning

### **Science**

- Knows effect of chemicals on humans and plants
- Analyzes and evaluates environmental issues related to waste management
- Applies and uses laboratory techniques safely
- Applies and uses maps, charts, tables and graphs to complete tasks
- Applies and uses scientific methods to solve problems
- Converts measurement units from metric to English and metric
- Describes and explains heat conduction/convection, insulation requirements, radiant heating, temperature, and converts Fahrenheit to centigrade and vice versa
- Measures time to complete a task
- Measures weight, temperature, time and the volumes of liquids and solids
- Uses computers for information processing
- Describes and explains chemical reactions including inhibitors
- Describes and explains the energy conversion process
- Describes and explains pulleys and levers as work saving devices
- Knows the environmental impact of materials (solid, liquid, gaseous)
- Understands the effect of chemicals on humans and plants
- Understands the interaction of organisms with their environment
- Describes the immune system, the digestive system, selected diseases, and causes of weight gain and loss

### **Food Sciences, Dietetics, and Nutrition**

**Standard V:** Integrate knowledge, skills, and practices required for careers in food science, dietetics, and nutrition.

**Benchmarks:**

1. Analyze career paths within food science, dietetics, and nutrition industries.
2. Apply risk management procedures to food safety, food testing, and sanitation.
3. Evaluate nutrition principles, food plans, preparation techniques, and specialized dietary plans.
4. Demonstrate basic concepts of nutritional therapy.
5. Demonstrate use of current technology in food product development and marketing.
6. Demonstrate food science, dietetics, and nutrition management principles and practices.

**Minimum Required Iowa Competencies (Indicators):**

1. Analyze nutritional needs and select foods for good health throughout life.
2. Prepare foods from the basic food groups.
3. Analyze fad diets and eating disorders.
4. Identify various cultural and regional cuisines.
5. Locate and/or utilize food and nutrition resources.

**Academic Proficiencies:****Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media
- Adapts listening strategies to utilize verbal and nonverbal content of communication
- Informally discusses, requests, and supplies information to associates

**Mathematics**

- Interprets charts, tables, and graphs
- Uses inductive and deductive reasoning to solve problems
- Distinguishes proportions and congruence
- Identifies the application of statistical processes
- Measures time, temperature, volume, and weight
- Mentally, manually, and by calculator, adds, subtracts, divides, multiplies whole and mixed numbers, fractions, decimals; calculates square root, percentages, and formulas
- Understands and applies basic and advanced methods of measurement
- Calculates and evaluates basic statistical routines
- Distinguishes proportions and congruence
- Estimates and rounds to determine estimated outcomes
- Formulates and verifies mathematical questions, determines the validity arguments, and establishes conclusions
- Identifies missing or irrelevant information when solving mathematical problems
- Interprets common symbols such as <, >, and =
- Understands sampling theory, probability theory, and error of measure

- Calculates and evaluates algebraic expressions; and solves problems and generates conclusions using deductive reasoning

### **Science**

- Understands the effect of chemicals on humans and plants
- Analyzes and evaluates environmental issues related to waste management
- Applies and uses laboratory techniques safely
- Applies and uses maps, charts, tables and graphs to complete tasks
- Applies and uses scientific methods to solve problems
- Converts measurement units from metric
- Describes and explains heat conduction/convection, insulation requirements, radiant heating, and temperature
- Measures weight, temperature, time and the volumes of liquids and solids
- Analyzes and evaluates food additives, MSG, and vitamins
- Uses computers for information processing
- Measures temperature using Fahrenheit and centigrade scales
- Describes and explains the relationship of heat and temperature
- Measures time to complete a task
- Knows the environmental impact of materials (solid, liquid, gaseous)
- Understands the interaction of organisms with their environment
- Describes the immune system, the digestive system, selected diseases, and causes of weight gain and loss
- Describes and explains pulleys and levers as work saving devices

## **Nutrition and Wellness**

**Standard VI:** Demonstrate nutrition and wellness practices that enhance individual and family well-being.

### **Benchmarks:**

1. Analyze factors that influence nutrition and wellness practices across the life span.
2. Evaluate the nutritional needs of individuals and families in relation to health and wellness across the life span.
3. Demonstrate ability to acquire, handle, and use foods to meet nutrition and wellness needs of individuals and families across the life span.
4. Evaluate factors that affect food safety, from production through consumption.
5. Evaluate the impact of science and technology on food composition, safety, and other issues.

### **Minimum Required Iowa Competencies (Indicators):**

1. Plan menus, prepare shopping list and purchase food.
2. Plan, prepare, serve and evaluate a meal.
3. Utilize basic kitchen skills in food preparation and storage.
4. Apply the principles of sanitation, recycling and safety when working with food and equipment.
5. Evaluate consumer health options.

### **Academic Proficiencies:**

#### **Language**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Adapts listening strategies to utilize verbal and nonverbal content of communication

### **Mathematics**

- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root
- Mentally adds, subtracts, divides, and multiplies whole numbers

### **Science**

- Analyzes chemicals in society
- Analyzes and evaluates environmental issues
- Describes and explains diseases
- Identifies organisms such as bacteria and fungi
- Uses common laboratory equipment and procedures
- Applies and uses laboratory techniques safely
- Measures weight, temperature, time and the volumes of liquids and solids
- Applies and uses maps, charts, tables and graphs to complete tasks
- Describes human maintenance and weight gain or loss

## **Family and Community Services**

**Standard VII:** Integrate knowledge, skills, and practices required for careers in family and community services.

### **Benchmarks:**

1. Analyze career paths within family and community services.
2. Analyze factors related to providing family and community services.
3. Demonstrate professional behaviors, skills, and knowledge in providing family and community services.
4. Evaluate conditions affecting individuals and families with a variety of disadvantaging conditions.
5. Identify services for individuals and families with a variety of disadvantaging conditions.

### **Minimum Required Iowa Competencies (Indicators):**

1. Explain the basic skills necessary to maintain personal, physical and mental health (i.e., alternative strategies in dealing with stress).
2. Identify personal safety and survival skills.
3. Identify substance abuse, use and non-use.
4. Describe procedures for prevention and control of diseases (i.e., sexually transmitted diseases and acquired immune deficiency syndrome).
5. Identify the needs and concerns of populations with special needs.
6. Examine family-individual health related occupations.
7. Locate and/or utilize family/individual health resources.
8. Locate/utilize resources for populations with special needs.



### **Academic Proficiencies:**

#### **Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrates competence in writing, editing, and proofing reports, summaries, and documentation using correct English spelling, grammar, and punctuation
- Adapts listening strategies to utilize verbal and nonverbal content of the communication

#### **Mathematics**

- Interprets charts, tables, and graphs

#### **Science**

- Analyzes drugs impact on society
- Uses computers for information processing
- Applies and uses maps, charts, tables, and graphs to complete tasks

### **Interpersonal Relationships**

**Standard VIII:** Demonstrate respectful and caring relationships in the family, workplace, and community.

#### **Benchmarks:**

1. Analyze functions and expectations of various types of relationships.
2. Analyze personal needs and characteristics and their impact on interpersonal relationships.
3. Demonstrate communication skills that contribute to positive relationships.
4. Evaluate effective conflict prevention and management techniques.
5. Demonstrate teamwork and leadership skills in the family, workplace, and community.
6. Demonstrate standards that guide behavior in interpersonal relationships.

#### **Minimum Required Iowa Competencies (Indicators):**

1. Analyze strategies for developing a positive self-concept

### **Academic Proficiencies:**

#### **Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Adapts listening strategies to utilize verbal and nonverbal content of communication
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media

## **Career, Community, and Family Connections**

**Standard IX:** Integrate multiple life roles and responsibilities in family, work, and community settings.

### **Benchmarks:**

1. Analyze strategies to manage multiple individual, family, career, and community roles and responsibilities.
2. Demonstrate transferable and employability skills in community and workplace settings.
3. Analyze the reciprocal impact of individual and family participation in community activities.

### **Minimum Required Iowa Competencies (Indicators):**

1. Demonstrate alternative ways of effective communication.
2. Describe ways to build good interpersonal relationships with others.
3. Identify risks of sexual activity.
4. Identify and demonstrate response to family problems and crisis (i.e., co-dependency relationships).
5. Identify sex-role stereotyping and means of dealing with them.
6. Develop problem-solving techniques.
7. Identify ways to deal with peer pressure.
8. Describe ways to strengthen family and relationships.
9. Identify the ways to balance work, family and individual needs.
10. Develop short and long-term planning, goal-setting and decision-making skills.
11. Examine family living/parenthood related occupations.

### **Academic Proficiencies:**

#### **Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Adapts listening strategies to utilize verbal and nonverbal content of communication
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation

#### **Mathematics**

- Adds, subtracts, divides, and multiplies whole and mixed numbers, fractions, and decimals
- Mentally adds, subtracts, divides and multiplies whole numbers

## **Early Childhood, Education, and Services**

**Standard X:** Integrate knowledge, skills, and practices required for careers in early childhood, education, and services.

**Benchmarks:**

1. Analyze career paths within early childhood, education, and services.
2. Analyze developmentally appropriate practices to plan for early childhood, education, and services.
3. Demonstrate integration of curriculum and instruction to meet children's developmental needs and interests.
4. Demonstrate a safe and healthy learning environment for children.
5. Demonstrate techniques for positive collaborative relationships with children.
6. Demonstrate professional practices and standards related to working with children.

**Minimum Required Iowa Competencies (Indicators):**

1. Identify types of sexual abuse and sexual harassment, and intervention options.
2. Identify and demonstrate response to family problems and crisis (i.e., co-dependency relationships).
3. Locate/utilize resources for populations with special needs.
4. Develop problem-solving techniques.
5. Identify ways to deal with peer pressure.
6. Examine child development related occupations.
7. Evaluate the impact of parenting roles and responsibilities on strengthening the well-being of individuals and families.
8. Examine various child care options.
9. Locate and/or utilize family living and parenthood resources.
10. Examine parenting responsibilities.
11. Describe sexual reproduction and the birthing process.
12. Analyze contraception and family planning methods.
13. Discuss health concerns and needs at various stages of prenatal and postnatal development.
14. Identify the additional risks of teen pregnancy and parenting.
15. Select and use appropriate child guidance techniques.
16. Identify types of child abuse, neglect and intervention options.
17. Discuss childhood diseases and immunization procedures.
18. Identify ways to provide a safe environment for a child.
19. Locate and/or utilize child development resources for assistance.
20. Select toys, equipment, food and materials appropriate for the developmental stage of a child.

**Academic Proficiencies:****Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation

**Mathematics**

- Adds, subtracts, divides, and multiplies whole and mixed numbers, fractions, and decimals

**Science**

- Applies and uses maps, charts, tables, and graphs to complete tasks

- Applies and uses scientific methods to solve problems
- Describes and explains organisms development and adaptation
- Uses computers for information processing
- Identifies operational definitions
- Knows the environmental impact of materials (solid, liquid, gaseous)
- Understands the effect of chemicals on humans and plants

### **Consumer Services**

**Standard XI:** Integrate knowledge, skills, and practices required for careers in consumer services.

#### **Benchmarks:**

1. Analyze career paths within consumer service industries.
2. Analyze factors that impact consumer advocacy.
3. Analyze factors in developing a long-term financial management plan.
4. Analyze resource consumption for conservation and waste management practices.
5. Demonstrate skills needed for product development, testing, and presentation.

#### **Minimum Required Iowa Competencies (Indicators):**

1. Identify consumer rights and responsibilities (i.e., preservation of natural resources and effective complaint procedures).
2. Evaluate advertising, warranties, written contracts and quality of goods and equipment (i.e., consumer fraud schemes).
3. Examine consumer education related occupations.
4. Locate and/or utilize consumer education resources for assistance.

#### **Academic Proficiencies:**

##### **Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Adapts listening strategies to utilize verbal and nonverbal content of communication
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation

##### **Mathematics**

- Interprets charts, tables, and graphs
- Solves problems and generates conclusions using deductive reasoning
- Mentally, manually, and by calculator, adds, subtracts, divides, multiplies whole and mixed numbers, fractions, decimals, calculates square root, percentages, and formulas
- Understands and applies basic and advanced methods of measurement
- Understands sampling theory, probability theory, and error of measure
- Calculates and evaluates algebraic expressions; and solves problems and generates conclusions using deductive reasoning
- Calculates and evaluates basic statistical routines

- Constructs charts, tables, and graphs

### **Science**

- Applies and uses maps, charts, tables and graphs to complete tasks
- Applies and uses scientific methods to solve problems
- Identifies operational definitions
- Uses computers for information processing

## **Textiles and Apparel**

**Standard XII:** Integrate knowledge, skills, and practices required for careers in textiles and apparel.

### **Benchmarks:**

1. Analyze career paths within textiles and apparel design industries.
2. Evaluate fiber and textiles materials.
3. Demonstrate apparel and textiles design skills.
4. Demonstrate skills needed to produce, alter, or repair textile products and apparel.
5. Evaluate elements of textiles and apparel merchandising.
6. Evaluate the components of customer service.
7. Demonstrate general operational procedures required for business profitability and career success.

### **Minimum Required Iowa Competencies (Indicators):**

1. Recognize the relationship between appearance and self-concept.
2. Plan a wardrobe and prepare a clothing budget.
3. Identify fabrics, fabric construction, finishes and care.
4. Identify elements and principles of clothing design.
5. Demonstrate use and care of a sewing machine and equipment in a safe manner.
6. Follow preparation procedures for constructing and evaluating a garment project.
7. Demonstrate repair, alteration and recycling methods.
8. Describe cleaning and storage methods.
9. Examine textiles and clothing related occupations.
10. Evaluate clothing and accessory purchases (i.e., construction, cost, and care).
11. Locate and/or utilize textiles and clothing resources for assistance (i.e., extension service, labeling, references and manufacturers).

### **Academic Proficiencies:**

#### **Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Adapts listening strategies to utilize verbal and nonverbal content of communication
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation

#### **Mathematics**

- Adds, subtracts, divides, and multiplies whole and mixed numbers, fractions, and decimals
- Uses a calculator to add, subtract, divide, multiply, whole and mixed numbers, decimals, calculate square root, percentages and ratios
- Mentally adds, subtracts, divides and multiplies whole numbers
- Understands and applies basic methods of measurement
- Calculates and evaluates precision measurements
- Measures distance using standard measurement tools
- Interprets charts, tables, and graphs

#### **Science**

- Uses computers for information processing
- Analyzes chemicals in society
- Applies and uses laboratory techniques safely
- Applies and uses maps, charts, tables and graphs to complete tasks
- Describes and explains chemical reactions
- Uses computers for information processing

### **Hospitality, Tourism, and Recreation**

**Standard XIII:** Integrate knowledge, skills, and practices required for careers in hospitality, tourism, and recreation.

#### **Benchmarks:**

1. Analyze career paths within the hospitality, tourism, and recreation industries.
2. Demonstrate procedures applied to safety, security, and environmental issues.
3. Apply concepts of service to meet customer expectations.
4. Demonstrate practices and skills involved in lodging occupations.
5. Demonstrate practices and skills for travel related services.
6. Demonstrate management of recreation, leisure, and other programs and events.

#### **Minimum Required Iowa Competencies (Indicators):**

1. Demonstrate employability-related skills.
2. Explore the relationship between an employee attitude and customer satisfaction.

#### **Academic Proficiencies:**

##### **Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information

##### **Mathematics**

- Interprets charts, tables, and graphs

##### **Science**

- Uses computers for information processing

### **Human Development**

**Standard XIV:** Analyze factors that impact human growth and development.

**Benchmarks:**

1. Analyze principles of human growth and development across the life span.
2. Analyze conditions that influence human growth and development.
3. Analyze strategies that promote growth and development across the life span.

**Minimum Required Iowa Competencies (Indicators):**

1. Examine the interrelationship between physical, emotional, social, and intellectual aspects of human growth and development.
2. Investigate the impact of heredity and environment on human growth and development.
3. Demonstrate communication and nurturing skills that promote human growth and development.

**Academic Proficiencies:**

**Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks

**Science**

- Describes human development processes

**Family**

**Standard XV:** Evaluate the significance of family and its impact on the well being of individuals and society.

**Benchmarks:**

1. Analyze the impact of family as a system on individuals and society.
2. Demonstrate appreciation for diverse perspectives, needs, and characteristics of individuals and families.

**Minimum Required Iowa Competencies (Indicators):**

1. Examine the evolving roles of families across the life span.
2. Demonstrate respect for cultural diversity and the impact on individuals and families.
3. Explore the ways family and consumer sciences careers assist the works of the family.
4. Examine family as the basic unit of society.

**Academic Proficiencies:**

**Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation
- Demonstrates competence in speaking to provide, distribute, or find information
- Adapts listening strategies to utilize verbal and nonverbal content of communication

## **Parenting**

**Standard XVI:** Evaluate the impact of parenting roles and responsibilities on strengthening the well being of individuals and families.

### **Benchmarks:**

1. Analyze roles and responsibilities of parenting.
2. Evaluate parenting practices that maximize human growth and development.
3. Evaluate external support systems that provide services for parents.
4. Analyze physical and emotional factors related to beginning the parenting process.

### **Minimum Required Iowa Competencies (Indicators):**

1. Identify strategies that promote positive relationships between family members.
2. Evaluate factors that promote physical and emotional health of a child and parent/s.

### **Academic Proficiencies:**

#### **Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation
- Demonstrates competence in speaking to provide, distribute, or find information
- Adapts listening strategies to utilize verbal and nonverbal content of communication

## **Occupational Options:**

### **Clothing, Apparel & Textiles**

**Standard XII:** Integrate knowledge, skills, and practices required for careers in textiles and apparel.

### **Benchmarks:**

1. Analyze career paths within textiles and apparel design industries.
2. Evaluate fiber and textiles materials.
3. Demonstrate apparel and textiles design skills.
4. Demonstrate skills needed to produce, alter, or repair textile products and apparel.
5. Evaluate elements of textiles and apparel merchandising.
6. Evaluate the components of customer service.
7. Demonstrate general operational procedures required for business profitability and career success.

### **Minimum Required Iowa Competencies (Indicators):**

1. Identify basic fibers, yarns, and fabrics.
2. Interpret pattern instructions, prepare fabric, and select notions for construction of a textile product.
3. Apply construction techniques in the preparation and/or alteration of a textile product.
4. Operate and maintain sewing equipment in a safe manner.



5. Read, interpret and follow care labels accurately.
6. Compute prices.
7. Wrap and package items.
8. Use proper customer thank you.
9. Handle and report complaints as directed.
10. Follow application of state and federal agency laws and regulations.
11. Select, receive, inspect, sort and stock inventory of textile products.
12. Arrange, select and prepare items for merchandising display.
13. Read tape measure/ruler accurately.
14. Measure clothing, apparel, and textiles.
15. Convert units of measurement accurately in the measuring of clothing, apparel and textiles.
16. Explain the inter-relatedness between sales and inventory tracking with computer and/or cash register.
17. Demonstrate computer literacy.
18. Explain company's policy on alcohol and drug testing and rehabilitation.

### **Academic Proficiencies:**

#### **Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Adapts listening strategies to utilize verbal and nonverbal content of communication
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation

#### **Mathematics**

- Adds, subtracts, divides, and multiplies whole and mixed numbers, fractions, and decimals
- Uses a calculator to add, subtract, divide, multiply, whole and mixed numbers, decimals, calculate square root, percentages and ratios
- Mentally adds, subtracts, divides and multiplies whole numbers
- Understands and applies basic methods of measurement
- Calculates and evaluates precision measurements
- Measures distance using standard measurement tools
- Interprets charts, tables, and graphs

#### **Science**

- Uses computers for information processing
- Analyzes chemicals in society
- Applies and uses laboratory techniques safely
- Applies and uses maps, charts, tables and graphs to complete tasks
- Describes and explains chemical reactions
- Uses computers for information processing

### **Food Production & Services**

**Standard IV:** Integrate knowledge, skills, and practices required for careers in food production and services.

**Benchmarks:**

1. Analyze career paths within the food production and food services industries.
2. Demonstrate food safety and sanitation procedures.
3. Demonstrate selecting, using, and maintaining food production equipment.
4. Demonstrate planning menu items based on standardized recipes to meet customer needs.
5. Demonstrate commercial preparation for all menu categories to produce a variety of food products.
6. Demonstrate implementation of food service management functions.
7. Demonstrate the concept of internal and external customer service.

**Minimum Required Iowa Competencies (Indicators):**

1. Identify the seven dietary guidelines.
2. Set a correct table.
3. Develop a meal pattern.
4. Present foods pleasing to the eye.
5. Serve food and beverages.
6. Take and place orders for food preparation.
7. Operate a cash register.
8. Count change.
9. Handle food safely.
10. Store food safely.
11. Identify laws and statutes dealing with food service establishments.
12. Use food preparation terminology correctly.
13. Prepare food in the four basic food groups.
14. Prepare beverages.
15. Follow recipes.
16. Operate and clean kitchen equipment.
17. Calculate food supply needs.
18. Evaluate consumer information (i.e., interpret labels).
19. Identify and use kitchen utensils correctly.
20. Receive, inspect, arrange, rotate and stock inventory.
21. Organize work area for efficiency of time and motion.
22. Pack and transport food, beverage and equipment to serving locations.
23. Discuss merchandising technique.
24. Identify customer service skills.
25. Compute basic customer billing.
26. Identify chemical hazards in the kitchen.
27. Identify safety hazards in the kitchen.
28. Demonstrate cleaning of facilities.

**Academic Proficiencies:****Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation

- Follows written and oral directions to complete tasks
- Informally discusses, requests, and supplies information to associates
- Adapts listening strategies to utilize verbal and nonverbal content of communication

### **Mathematics**

- Interprets charts, tables, and graphs
- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, calculate square root, percentages, and ratios
- Mentally adds, subtracts, divides, and multiplies whole numbers
- Measures time, temperature, volume, and weight
- Converts word problems to mathematical expressions
- Uses inductive and deductive reasoning to solve problems
- Distinguishes proportions and congruence
- Identifies the application of statistical processes
- Uses a calculator or computer to manipulate formulas
- Understands and applies basic and advanced methods of measurement
- Calculates and evaluates algebraic expressions; and solves problems and generates conclusions using deductive reasoning

### **Science**

- Knows effect of chemicals on humans and plants
- Analyzes and evaluates environmental issues related to waste management
- Applies and uses laboratory techniques safely
- Applies and uses maps, charts, tables and graphs to complete tasks
- Applies and uses scientific methods to solve problems
- Converts measurement units from metric to English and metric
- Describes and explains heat conduction/convection, insulation requirements, radiant heating, temperature, and converts Fahrenheit to centigrade and vice versa
- Measures time to complete a task
- Measures weight, temperature, time and the volumes of liquids and solids
- Use computers for information processing
- Describes and explains chemical reactions including inhibitors
- Describes and explains the energy conversion process
- Describes and explains pulleys and levers as work saving devices
- Knows the environmental impact of materials (solid, liquid, gaseous)
- Understands the effect of chemicals on humans and plants
- Understands the interaction of organisms with their environment
- Describes the immune system, the digestive system, selected diseases, and causes of weight gain and loss

### **Home Furnishings**

**Standard I:** Understands the knowledge, skills and practices required for careers in housing interiors and furnishings.

### **Benchmarks:**

1. Analyze career paths within the housing, interiors, and furnishings industry.
2. Evaluate housing decisions in relation to available resources and options.
3. Evaluate the use of housing and interior furnishings and products in meeting specific design needs.
4. Demonstrate computer-aided drafting design, blueprint reading, and space planning skills required for the housing, interiors, and furnishings industry.
5. Analyze influences on architectural and furniture design and development.
6. Evaluate client's needs, goals, and resources in creating design plans for housing, interiors, and furnishings.
7. Demonstrate design ideas through visual presentation.
8. Demonstrate general procedures for business profitability and career success.

**Minimum Required Iowa Competencies (Indicators):**

1. Analyze living space and human needs.
2. Plan and compute finances, costs and sales.
3. Prepare, organize and maintain records, correspondence and file information.
4. Maintain safe working conditions.
5. Identify textile characteristics, care requirements and labeling standards.
6. Coordinate the elements and principles of design in interiors effectively.
7. Identify basic characteristics of historical periods as related to furniture, art, and architecture.
8. Evaluate appropriate home furnishings for performance, safety, cost, quality, and energy efficiency.
9. Prepare scaled drawings and evaluate floor plans.
10. Recognize established business policies and procedures.
11. Manage quality and quantity of work performed.
12. Develop selling techniques.
13. Demonstrate courteous telephone techniques.

**Academic Proficiencies:**

**Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media
- Adapts listening strategies to utilize verbal and nonverbal content of communication
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation

**Mathematics:**

- Constructs and interprets charts, tables, and graphs
- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, and calculate square root, calculate percentages, ratios, and formulas
- Mentally adds, subtracts, divides, and multiplies whole numbers
- Precisely calculates areas, circumferences, perimeters, and surface areas of geometric figures
- Estimates and rounds to determine estimated outcomes
- Measures distance, using standard measurement tools

- Distinguishes proportions and congruence
- Identifies the application of statistical processes
- Constructs angles, geometric figures, and lines
- Distinguishes characteristics of angles, circles, and arcs
- Interprets common symbols such as <, >, and =
- Identifies parallel/perpendicular, vertical/horizontal lines, and line rays/segments

**Science:**

- Uses computers for information processing
- Analyzes and evaluates environmental issues

### **Institutional Home Management**

**Standard III:** Integrate knowledge, skills, and practices required for careers in facilities management and maintenance.

**Benchmarks:**

1. Analyze career paths within the facilities management and maintenance areas.
2. Demonstrate planning, organizing, and maintaining an efficient housekeeping operation.
3. Demonstrate sanitation procedures for a clean and safe environment.
4. Apply hazardous materials and waste management procedures.
5. Demonstrate a work environment that provides safety and security.
6. Demonstrate appropriate laundering processes.
7. Demonstrate facilities management functions.

**Minimum Required Iowa Competencies (Indicators):**

1. Analyze and explore career and job opportunities.
2. Recognize and evaluate care programs.
3. Organize work procedures.
4. Plan for, establish and maintain a safe, clean, healthy and secure environment.
5. Use home management cleaning procedures.
6. Use institutional cleaning procedures.
7. Use and care for the fire extinguishers.
8. Follow oral/written instructions for performing.
9. Follow ethical standards.
10. Communicate information.
11. Recognize and plan for care of individuals with special needs.
12. Use emergency first aid procedures.
13. Recognize crisis situations and deal with individuals involved.
14. Select, purchase and store food.
15. Develop plans to meet the nutritional needs of individual families.
16. Plan, prepare and serve meals according to established criteria.
17. Provide basic homemaker services.
18. Use home and/or commercial laundry equipment.
19. Care for linens and/or clothing.
20. Select and use proper cleaning equipment and supplies.
21. Maintain equipment, furnishing and surfaces and make minor repairs.
22. Manage resources.
23. Guide physical, social, emotional and intellectual development.

24. Establish positive, productive relations with the family.
25. Develop rapport.
26. Provide or assist in the social and recreational care of individuals.
27. Use business procedures in home and/or institutional management.
28. Provide or assist in the personal care of individuals.
29. Carry out responsibilities related to the prescribed programs.
30. Maintain professionalism.
31. Carry out legal responsibilities related to the total program including the identification and reporting of any abuse and/or neglect.

### **Academic Proficiencies:**

#### **Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Adapts listening strategies to utilize verbal and nonverbal content of communication
- Demonstrates competence in making oral formal and informal presentations, including selecting and using media

#### **Mathematics**

- Interprets charts, tables, and graphs
- Adds, subtracts, divides, multiplies whole and mixed numbers, fractions, and decimals
- Uses a calculator to add, subtract, divide, multiply whole and mixed numbers, decimals, calculate square root, percentages, and ratios
- Mentally adds, subtracts, divides, and multiplies whole numbers
- Understands and applies basic and advanced methods of measurement
- Precisely calculates areas, circumferences, perimeters, volume, and surface areas of geometric figures
- Solves problems and generates conclusions using deductive reasoning
- Understands geometric figures using visual perception and line and angle relationships
- Distinguishes characteristics of angles, circles, and arcs
- Measures angles
- Constructs lines, both parallel and perpendicular

#### **Science**

- Uses computers for information processing
- Knows the environment impact of materials (solid, liquid, gaseous)
- Identifies acids and bases
- Describes and explains chemical reactions related to contamination

### **Child Care**

**Standard X:** Integrate knowledge, skills, and practices required for careers in early childhood, education and services.

**Benchmarks:**

1. Analyze career paths within early childhood, education, and services.
2. Analyze developmentally appropriate practices to plan for early childhood, education, and services.
3. Demonstrate integration of curriculum and instruction to meet children's developmental needs and interests.
4. Demonstrate a safe and healthy learning environment for children.
5. Demonstrate techniques for positive collaborative relationships with children.
6. Demonstrate professional practices and standards related to working with children.

**Minimum Required Iowa Competencies (Indicators):**

1. Identify personal qualities required of a childcare provider (referring to nurturing and caring).
2. Identify basic elements (principles) of child development with emphasis on age appropriate behaviors/expectations of physical, emotional, intellectual, and social development.
3. Assess a child in the four developmental areas: physical, social, intellectual, and emotional.
4. Observe and record a child's developmental progress.
5. Plan and implement appropriate activities to promote development in children and adolescents in the following areas: outdoor/indoor, gross/fine motor, language development, creativity, visual, auditory and tactile stimulus, cognitive, nutrition, and social development.
6. Explain the impact of caregiver practices on a child's self-esteem.
7. Plan, prepare, and serve nutritional snacks/meals that allow for self-feeding when appropriate.
8. Identify proper nutritional needs and use appropriate feeding procedures for infants and toddlers.
9. Use appropriate diapering and toileting procedures for infants/toddlers/children.
10. Identify elements of a healthy and safe environment.
11. Use appropriate and effective methods of guidance.
12. Analyze the importance of play on the development of children.
13. Identify issues that relate to the care of school-age children.
14. Help children and adolescents learn coping skills.
15. Maintain records.
16. Follow personnel and center policies.
17. Explain the functions of the center to the community.
18. Communicate and interact with families in an appropriate manner.
19. Identify issues involved in the daily care of children with special needs.
20. Identify factors contributing to child abuse.
21. Identify indications of child abuse.
22. Identify procedures for reporting and documenting child abuse.
23. Select and use age appropriate safety restraint when transporting children.
24. Identify legal issues related to childcare to include: confidentiality, custody, corporal punishment, personal and center liability, transporting children, and medical emergencies.
25. Identify rules and regulations (laws) governing childcare.
26. Incorporate multicultural, nonsexist experiences in all aspects of childcare.
27. Recognize and accept cultural/individual differences.
28. Explain the qualities of professionalism for child care providers to include: responsibility to children, families, staff and center; advocacy for children; professional pride; respect of children, families, and staff; and professional growth.

**Academic Proficiencies:****Language Arts**

- Applies the reading process and strategies to directions or tasks that are relatively short, with limited categories of information, directions, concepts, and vocabulary
- Demonstrates competence in using various information sources, including knowledge-based and technical texts, to perform specific tasks
- Demonstrates competence in speaking to provide, distribute, or find information
- Demonstrates competence in writing and editing documents, using correct grammar, and punctuation

### **Mathematics**

- Adds, subtracts, divides, and multiplies whole and mixed numbers, fractions, and decimals

### **Science**

- Applies and uses maps, charts, tables, and graphs to complete tasks
- Applies and uses scientific methods to solve problems
- Describes and explains organisms development and adaptation
- Uses computers for information processing
- Identifies operational definitions
- Knows the environmental impact of materials (solid, liquid, gaseous)
- Understands the effect of chemicals on humans and plants

## **Iowa Leadership, Job Getting, Job Keeping, Entrepreneurship Competencies:**

**The Iowa Family and Consumer Sciences Comprehensive and Occupational Indicators/Competencies also include indicators/competencies in the following areas: leadership, job getting/job keeping and entrepreneurship. These indicators/competencies are listed below:**

### **Leadership Indicators/Competencies:**

1. Follow directions.
2. Speak effectively in front of others.
3. Facilitate a discussion.
4. Organize an event or task.
5. Utilize time effectively.
6. Prioritize a series of tasks.
7. Define goals.
8. Work effectively with others.
9. Listen effectively.
10. Resolve conflicts.
11. Adapt to environment/situation.
12. Demonstrate effective interpersonal communication skills.
13. Demonstrate positive attitude.

### **Job Getting/Job Keeping Indicators/Competencies:**

1. Identify requirements/skills for a job.



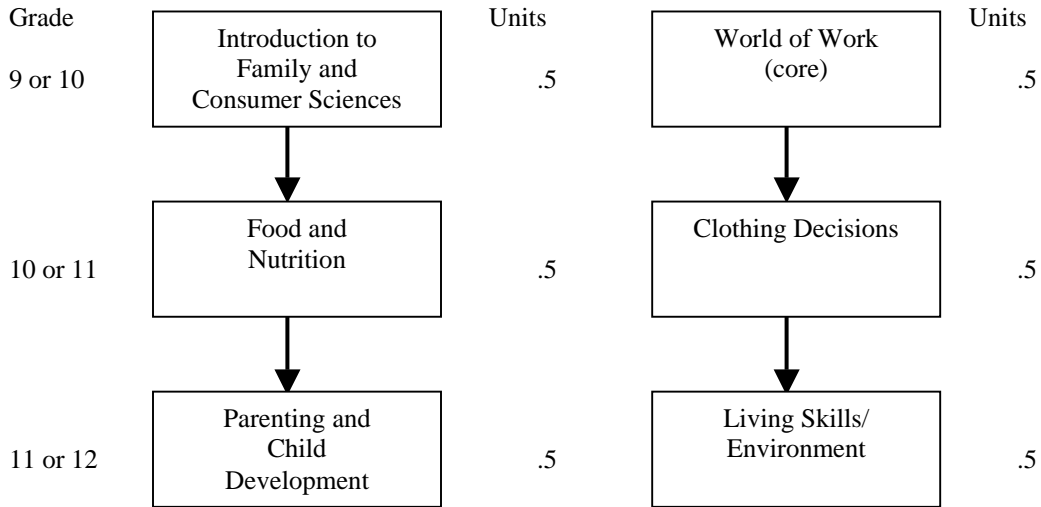
2. Complete required forms correctly.
3. Write application letter correctly.
4. Interact with others in a courteous and tactful manner.
5. Cooperate with others.
6. Accept individual differences.
7. Respect property of others.
8. Organize thoughts and communicates clearly.
9. Exhibit dependability.
10. Demonstrate punctuality.
11. Ask for help when needed.
12. Accept new challenges.
13. Accept supervision willingly.
14. Adapt to change/demonstrates flexibility.
15. Manages time effectively.
16. Follow rules and regulations and guidelines.
17. Produce quality work.
18. Take responsibilities for mistakes and/or good work.
19. Comply with safety and health rules.
20. Utilize equipment correctly.
21. Maintain clean and orderly work area.
22. Demonstrate personal hygiene, cleanliness, and appropriate dress.
23. Accept constructive criticism.
24. Demonstrate initiative.
25. Demonstrate loyalty to employer/business.

**Entrepreneurship Indicators/Competencies:**

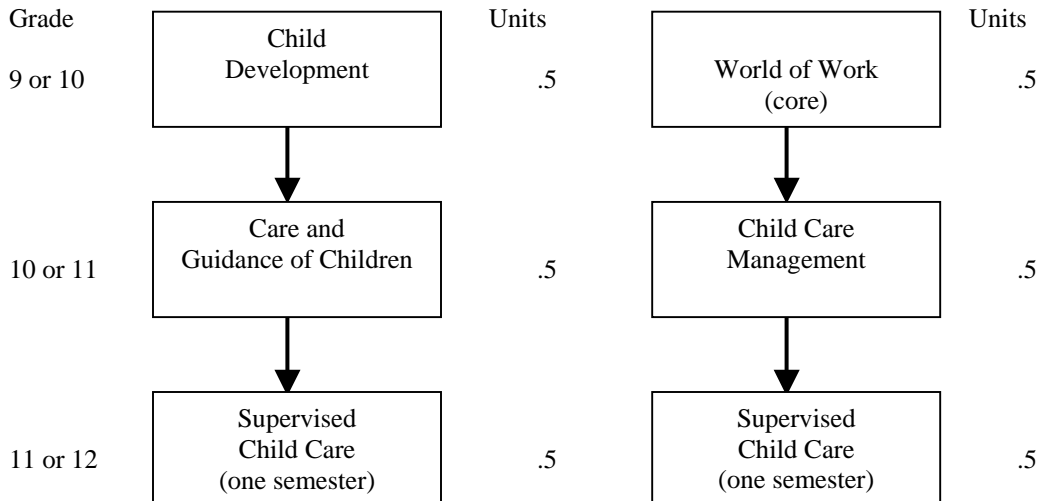
1. Demonstrate ethics in business.
2. Identify the personal characteristics of entrepreneurs.
3. Recognize the importance of resources for technical assistance.
4. Explain types of business ownership.
5. Identify factors in obtaining finances for a new business.

# MODEL PROGRAM SEQUENCE

## **COMPREHENSIVE OPTION:** **FAMILY AND CONSUMER SCIENCES**



## **OCCUPATIONAL OPTION:** **CHILD CARE**



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